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THESIS

THE CONCEPT OF MATERIALITY AND ITS APPLICATION TO THE REQUIREMENTS OF THE FEDERAL MANAGERS' FINANCIAL INTEGRITY ACT

by

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Topics considered include: internal control in the Federal Government; internal control evaluation in the Federal

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The research consisted primarily of a detailed search and evaluation of the literature in the area of internal control evaluation in the Federal Government and the concept of materiality both in the private sector and the Federal Government.

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This thesis provides a review of the process of evaluating internal control systems for the Federal Managers' Financial Integrity Act and the application of the concept of materiality to that process.

Topics considered include: internal control in the Federal Government; internal control evaluation in the Federal Government; the concept of materiality in the private sector and the Federal Government; and guidelines for determining material weaknesses in internal control systems. The conclusion was reached that with additional training in the area of materiality, and supported with a material weakness checklist, managers in the Federal Government can better fulfill their requirements for internal control evaluation.

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I. INTRODUCTION

A. PURPOSE

The Federal Managers' Financial Integrity Act of 1982 requires the head of each executive department to report on their agencies' internal control systems annually. Included in this report is a statement on the "material weaknesses", if any, in the agency's system of internal control. In the current implementation of the act, much concern is given to the lack of a meaningful definition of what constitutes a material weakness. This confusion stems from the fact that the concept of materiality, a widely used accounting term in the private sector, is subject to considerable debate over its meaning and application. The purpose of this thesis is to review the process of evaluating internal control systems, and the application of the concept of materiality to that process.

B. BACKGROUND

In response to growing reports of fraud, waste and abuse in the Federal government the Ninety-seventh Congress of the United States of America passed the Federal Managers' Financial Integrity Act of 1982 (FMFIA). The stated purpose of the FMFIA is:

> To amend the Accounting and Auditing Act of 1950 to require ongoing evaluations and reports on the adequacy of the systems of internal accounting and administrative

control of each executive agency, and for other purposes. [Ref. 1]

The FMFIA directed the Office of Management and Budget (OMB) in consultation with the Comptroller General of the United States to establish guidelines for these evaluations and reports.

The OMB responded to the requirements of the FMFIA by revising their Circular No. A-123. This Circular was originally published in 1981 to promulgate standards of internal control for agencies in the Federal government. The revised edition incorporates the requirements of the FMFIA. The primary mechanism utilized by A-123 to accomplish the goals of the FMFIA is the requirement for each executive agency to conduct annual evaluations of its system of internal accounting and administrative control and report to the President and Congress on the status of that system. An integral part of this report is a statement identifying material weaknesses, if any, in the agencies' internal control system.

It is this requirement to report on material weaknesses in internal control systems that has created problems in the implementation of the FMFIA. To report on a material weakness, one first has to understand the meaning of the term. In A-123, the OMB defined a material weakness as:

> ...a situation in which the designed procedures or degree of operational compliance therewith does not provide reasonable assurance that the objectives of internal control specified in the Act are being accomplished. [Ref. 2]

This definition while possibly having some meaning to persons familiar with the technical language of public accounting,

provides little guidance for the managers required to make the evaluations. Indeed, both the General Accounting Office (GAO), and the Congress in their evaluations of first year implementation of the FMFIA pointed out the need for a more practical definition of material weakness. The need for practical definitions stems from the fact that internal control, materiality, reasonable assurance and other nomenclature used in both the FMFIA and A-123 are not normally used by managers of Federal agencies. To successfully implement the requirements of the FMFIA and A-123, agencies in the Federal government must provide their managers with practical definitions of these terms and their application.

C. SCOPE AND METHODOLOGY

The objective of this thesis is to research the concept of materiality, and attempt to apply it to the evaluation of internal control systems in the Federal government.

The history and evolution of internal control in the Federal Government will be reviewed from the Accounting and Auditing Act of 1950, to the requirements of the Federal Managers' Financial Integrity Act of 1982 (FMFIA) and their implementation.

The standards of internal control in the Federal Government will be presented in order to provide a background for the evaluation of internal control systems. This includes both the general and specific standards of internal control.

In depth coverage is given to the process for internal control evaluation in the Federal Government. The organization and implementation of this process is the essential element of the FMFIA. An understanding of this evaluation and the results from it, is critical to the evaluation of internal control weaknesses.

Managers in the Federal Government must understand the concept of materiality to evaluate their systems of internal control for material weaknesses. Therefore, this concept is reviewed as it is applied in the private sector for financial statement reporting and auditing. Additional coverage is given to the concept of materiality as it is applied in the Federal Government.

Using the information gained from the research, the author develops guidelines to assist managers in the determination of material weaknesses in internal control systems. These guidelines are incorporated into a checklist to be used in the evaluation of control weaknesses.

Finally, the conclusion is reached that managers in the Federal Government need more training in the concept of materiality. With this training and the use of aids like the material weakness checklist, managers in the Federal Government can better fulfill their requirements for internal control evaluation under the FMFIA.

The research consisted primarily of a detailed search and evaluation of the literature in the area of internal control

systems and their evaluation in the Federal Government, and the concept of materiality.

II. INTERNAL CONTROL IN THE FEDERAL GOVERNMENT

A. INTRODUCTION

This chapter provides background on internal control in the Federal Government. Topics to be considered include the legislation affecting the development of internal control in the Federal Government, guidelines for those controls and the standards of internal control in the Federal Government.

B. ACCOUNTING AND AUDITING ACT OF 1950

The modern concept of internal control in the Federal Government finds its roots in the Accounting and Auditing Act of 1950 which required the heads of agencies in the Federal Government to establish and maintain adequate systems of accounting and internal control. Among other requirements these systems were to be designed to provide "effective control over and accountability for all funds, property, and other assets for which the agency is responsible, including appropriate internal audit" [Ref. 3].

The Act required the General Accounting Office to cooperate in the development of the internal control systems and the Comptroller General to approve them. In addition the General Accounting Office was directed to review these systems from time to time. However the act did not provide specific guidance on internal control systems or require mandatory reports on the quality of those systems.

C. OFFICE OF MANAGEMENT AND BUDGET CIRCULAR A-123

Even though the Accounting and Auditing Act of 1950 required the development of internal control systems, the development of such systems was slow. In 1980 the General Accounting Office released a study that disclosed instances of fraud, waste and abuse. In addition the study found poor internal controls in many agencies. [Ref. 4]

As a result of the disclosure of fraud, waste and abuse, the Office of Management and Budget released Circular A-123 in October of 1981. This circular required agencies of the Federal Government to establish policies on internal controls. It defined internal controls as:

> the plan for oragnization and all the methods and measures adopted within an agency to safeguard its resources, assure the accuracy and reliability of the information, assure adherence to applicable laws, regulations and policies, and promote operational economy and efficiency. [Ref. 5]

Unlike the Accounting and Auditing Act of 1950, Circular A-123 directed agencies to establish directives on internal control, required an assessment of the inherent risk to fraud, waste and abuse of an activity and provided for a review of internal controls. These steps were taken to provide for the realization of the provisions of the act of 1950.

D. FEDERAL MANAGERS' FINANCIAL INTEGRITY ACT OF 1982

In September of 1982 the 97th Congress of the United States passed an amendment to the Accounting and Auditing Act of 1950. This Act required that each agency of the

Federal Government establish internal accounting and administrative controls. The Act specifically required that these controls would provide reasonable assurance that:

(i) obligations and costs are in compliance with applicable law;

(ii) funds, property, and other assets are safeguarded against waste, loss, unauthorized use, or misappropriation; and

(iii) revenues and expenditures applicable to agency operations are properly recorded and accounted for... [Ref. 6]

Although the Act did not define the meaning of internal and administrative controls or what "reasonable assurance" meant, it did direct the Comptroller General to provide such standards.

In an effort to insure that the requirements of this Act were met, Congress included a provision for the head of each agency to conduct an annual evaluation of their system of internal control. A report of this evaluation must be made to the President and to Congress. Among other things this report must include a statement that the agency's systems of internal and administrative controls are in compliance with the Act. If they are not, an additional statement identifying those material weaknesses in the agency's systems of internal accounting and administrative control must be included.

The Act directed the evaluation and reporting requirements to be implemented in two steps. The first step was the preparation of guidelines for the evaluation of internal and administrative controls by the Office of Management and Budget in consultation with the Comptroller General by December 31,

1982. The second step required the commencement of annual reporting by the agencies by December 31, 1983.

E. STANDARDS FOR INTERNAL CONTROLS IN THE FEDERAL GOVERNMENT

In 1983 the General Accounting Office published the internal control standards of the Comptroller General that were required by the Federal Managers' Financial Integrity Act of 1982. This document included the following definition of an internal control standard:

> The internal control standards define the minimum level of quality acceptable for internal control systems in operation and constitute the criteria against which systems are to be evaluated. These internal control standards apply to all operations and administrative functions... [Ref. 7]

This definition makes clear that these standards are to apply not only to traditional areas of internal control (i.e., financial or accounting systems), but also to administrative functions. Indeed, almost every activity that is conducted by an agency is subject to an internal control. These controls may be in the form of instructions, standards of performance, mission requirements, program objectives, etc.

The standards for internal control in the Federal Government are broken into three areas: general standards of internal control, specific standards of internal control and the audit resolution standard. The general and specific standards will be discussed in detail.

1. <u>General Standards of Internal Control</u>

The general standards apply to all aspects of internal control. They include the following five standards.

a. Reasonable Assurance

"Internal control systems are to provide reasonable assurance that the objectives of the systems will be accomplished" [Ref. 7: p. 4]. The standard of reasonable assurance is subject to considerable judgment. This is because an internal control should be cost-beneficial. The benefits of having the control should not outweigh the costs whether financial, in lost opportunity or whatever the control is meant to accomplish. The benefit to be derived from a control consists of the reduction in risk of failing to achieve the objective of the control. The objective might be stated in absolute terms such as "there will be no theft of government vehicles," or it may be stated as a minimum level of control such as "the loss of government ball point pens will be held to ten percent." Increasing the amount of control in the objective will result in an increase in cost. Therefore each control must be judged as to its objective, benefit and cost.

b. Supportive Attitude

"Managers and employees are to maintain and demonstrate a positive and supportive attitude toward internal controls at all times" [Ref. 7: p. 4]. The attitude displayed by the management of an agency and its employees to internal control plays a large part in the effectiveness of these controls. This standard requires that a positive and supportive attitude be maintained. The initiative for

this rests with management. Their concern for the conception, implementation and operation of internal control is reflected in the employees. Such practices as encouraging internal review, providing training for employees in internal control and prompt response to audit findings will contribute to a supportive attitude.

c. Competent Personnel

"Managers and employees are to have personal and professional integrity and are to maintain a level of competence that allows them to accomplish their assigned duties, as well as understand the importance of developing and implementing good internal controls" [Ref. 7: p. 5]. Managers and their staffs are required to maintain and demonstrate integrity (both personally and professionally), an appropriate skill level and an understanding of internal controls sufficient for their responsibilities. Integrity is expected, and is maintained through codes of conduct. Personnel should be reminded of this obligation periodically. Personnel should not be hired unless they meet the minimum requirements of education for their job and this should be verified. In addition training should be provided both formally and on-the-job. To insure that personnel are competent they should be reviewed for proper performance and counseled if found to be lacking.

d. Control Objectives

"Internal control objectives are to be identified or developed for each agency activity and are to be logical,

applicable, and reasonably complete" [Ref. 7: p. 6]. The objectives of internal control must be tailored to the agency for each of its operations. To establish this the operations of an agency are grouped into cycles such as agency management, financial, program (operational) and administrative. Each agency must determine its cycles and establish the control objectives around these. It must be remembered that these cycles will interface with and affect the others. When these cycles are analyzed in detail it is possible to evaluate the objectives of the cycle and establish controls to meet those objectives. The standard of reasonable assurance should be included in this process.

e. Control Techniques

"Internal control techniques are to be effective and efficient in the accomplishment of their internal control objectives" [Ref. 7: p. 7]. The final general standard requires that the techniques of control are both effective and efficient. These techniques are the controls which accomplish the objectives of the agency. Such controls could be as simple as a guard to prevent unauthorized entry to a secure space or separation of duties in a receiving department to prevent the person taking custody of goods to account for their receipt. The control could be more complex such as rules-of-engagement for military forces to prevent international incidents. Whatever their form, control techniques should insure that the objective is met within the cost limitations. These

techniques must be subject to continuing evaluation and be adapted as necessary.

2. Specific Standards

Even though each agency must define its own control techniques, there are certain essential techniques which are critical to assure an agency meets their objectives. These are the six specific standards.

a. Documentation

"Internal control systems and all transactions and other significant events are to be clearly documented, and the documentation is to be readily available for examination" [Ref. 7: p. 8]. This standard can be summed up simply as "write it down." Specifically, it requires that the internal controls of an organization, their objectives, techniques and all other significant events of an organization be maintained in writing. This standard insures that the agency has their system of internal control in directives, manuals, etc., and also provides auditors with a guide for their review.

b. Recording of Transactions and Events

"Transactions and other significant events are to be promptly recorded and properly classified" [Ref. 7: p. 9]. While similar in nature to the standard of documentation, this standard specifically calls for the design, implementation and maintenance of an information system. While this system may be manual or automated, it should insure that a record is maintained of each event through its entire

cycle, beginning to end. This standard provides management with the information it needs to control operations and provides records for internal review and audits.

c. Execution of Transactions and Events

"Transactions and other significant events are to be authorized and executed only by persons acting within the scope of their authority" [Ref. 7: p. 9]. The purpose of this standard is to insure that an agency and its activities only involve themselves in legitimate activities. The technique used is that of authorization. Without proper authorization a transaction should not be entered into. An example of this would be the fueling of a personal vehicle with government fuel. The control could be a lock on the pump with the key issued by a supervisor who maintained logs of vehicles fueled and miles driven. In order to insure compliance with this standard, authorization must be clearly understood by all personnel involved.

d. Separation of Duties

"Key duties and responsibilities in authorizing, processing, recording, and reviewing transactions should be separated among individuals" [Ref. 7: p. 10]. Key duties include authorizing, approving and recording events, issuing and receiving assets, making payments, etc. The primary factor for deciding when to separate duties is if the performance of the duties by one person would allow that person to commit fraud, waste or abuse. An example would be an accounts payable clerk that issued the checks to pay those

accounts. This clerk could update the records that an account had been paid and then issue a check to him/herself. To prevent this, those duties are separated. It should be noted that this control will not prevent the collusion of two or more persons performing key duties.

e. Supervision

"Qualified and continuous supervision is to be provided to ensure that internal control objectives are achieved" [Ref. 7: p. 10]. This standard includes not only the monitoring of employee performance but also that they receive training and direction. This should include the communication of duties, responsibilities and accountability to personnel, periodic review of performance and the approval of work at critical points to ensure timely completion. It is this standard that ties together internal controls and can prevent weaknesses such as collusion from occurring.

f. Access to and Accountability for Resources

"Access to resources and records is to be limited to authorized individuals, and accountability for the custody and use of resources is to be assigned and maintained. Periodic comparison shall be made of the resources with the recorded accountability to determine whether the two agree. The frequency of the comparison shall be a function of the vulnerability of the asset" [Ref. 7: p. 11]. Every agency and activity in the Federal Government has assets. These assets must be protected from fraud, waste and abuse. However, some

assets are more vulnerable to fraud, waste and abuse than others. This is because of factors such as; value, ease of theft, east of resale, etc. An example would be a comparison of aircraft engines and typewriters. An aircraft engine would not be a likely candidate for abuse because of its size and limited marketability. However, typewriters could be easily transported and are very marketable. Therefore it stands to reason that one requires more control than the other. Each agency must evaluate its resources and establish controls that provide reasonable assurance that these resources are protected and used only as authorized.

F. CONCLUSION

The implementation of internal control systems within the Federal Government has been a continuing (albeit slow) process over the last three decades or so. However, passage of the Federal Managers' Financial Integrity Act of 1982 requires implementation and evaluation of these controls.

The standards for internal controls promulgated by the Comptroller General must be understood by personnel implementing and evaluating these systems. However, it must be remembered that these standards are broad guidelines and management is responsible for the establishment of their own specific controls.

With an understanding of internal control in the Federal Government we will now discuss the evaluation of internal control systems.

III. INTERNAL CONTROL EVALUATION IN THE FEDERAL GOVERNMENT

A. INTRODUCTION

The evaluation of internal controls has been practiced in the private sector by public accountants for a number of years. However, the nature and scope of these evaluations is by no means in general agreement. As noted in the Handbook Of Accounting And Auditing:

> Although auditors have studied and used evaluations of internal accounting controls for many years, the professionals still debate the best and most effective way to do so. [Ref. 8]

With the passage of the Federal Managers' Financial Integrity Act of 1982, Congress directed agencies in the Federal Government to conduct evaluations of their systems of internal control. Furthermore, the Act directed the Office of Management and Budget to develop and promulgate guidelines for the evaluation of internal controls. These guidelines were released in December, 1982 and are based on techniques similar to those used by financial auditors to evaluate internal control in the preparation of financial statements. However, the OMB guidelines are expanded to include administrative and program activity controls since the audit of financial statements does not normally include administrative controls. Rather the evaluation of internal control in the process of financial statement audits is designed to give the auditor confidence in the internal control system thus reducing the number of actual transactions examined.

An understanding of the internal control evaluation process is necessary before one can do such evaluations and analyze the results. In the guidelines published by the Office of Management and Budget [Ref. 9], a seven phase approach is outlined for the evaluation, improvement and reporting on internal controls. They include the organization of the process, segmenting the agency for evaluation, vulnerability assessments, evaluation planning, conducting the evaluation, corrective action and reporting on the evaluation. This chapter will focus on this process.

B. ORGANIZING THE EVALUATION PROCESS

In order for the evaluation of internal controls to be effective, the process must be understood by all involved. Organizing provides the framework for the remainder of the evaluation effort. The primary considerations for this step follow.

1. Assignment Of Responsibility

The responsibility for the annual report required on the evaluation of internal controls rests with the head of the agency. The preparation of the report is carried out by the systematic delegation of duties throughout the agency. This delegation must be based on the size of the agency, its organization, functions, objectives, etc. However, certain points remain common. One is the assignment of a senior official with overall responsibility for the process. This official oversees the heads of organizational units and they

in turn oversee the heads of the activities they are responsible for. Ideally the process should be organized along the organizational lines that the agency operates, down to the lowest feasible responsibility level.

In addition to the delegation of line management responsibility, the Inspector General or equivalent of the agency, audit functions of the agency and internal review functions already in existence can be used to help in the organizing process. This can also prevent duplication of effort when the actual evaluation is performed.

2. System For Internal Reporting Of Evaluation Process

In order to insure that the evaluation process is performed in a timely manner consistent with the program designed for the agency, there must be a system to follow-up and report on the process. This system should include tracking for vulnerability assessments, internal control reviews and corrective action taken in response to weaknesses revealed in the evaluation. The purpose of this system is to provide information for annual reporting and to aid the improvement of internal controls by providing management with the requisite information on the evaluation.

3. Documentation

Just as proper documentation is a standard of internal control, it is also a requirement for the evaluation process. This documentation should consist of all instructions related to the implementation of the process, the record of vulnerability assessments, internal control reviews, follow-up action

and anything else that would be considered relevant to the evaluation process. This is to provide management with information that will confirm the validity of the evaluation process and/or improve it.

4. Training And Supervision Of Personnel

In order to provide maximum effectiveness in the improvement of an agency's system of internal control the evaluation process should involve personnel down to the lowest level of responsibility. In most instances these people will have little or no background in internal control. Therefore, an agency must design a program of training for these people. It should provide an understanding of internal controls, vulnerability assessments, internal control reviews and the like. The agency may use available information on these areas but it must also include their own instructions on the evaluation process.

When the personnel that are involved in the process have received training, the evaluation can be performed but adequate supervision must be provided. This should include technical assistance, monitoring of the personnel and an individual appraisal of their peformance. To insure proper performance, personnel should be advised that their performance in the evaluation process will be included in their overall evaluation of performance.

5. Scheduling Of The Evaluation Process

The evaluation process is driven by the requirements of OMB Circular A-123. It directs that agencies shall provide

an annual statement to the President and Congress by December 31. Scheduling of the process should insure that the information required for the statement is provided so as to meet this requirement. In the completion of the evaluation the agency should take into account such things as the cyclical nature of some operations, availability of personnel, consideration of classified activities and other matters that require similar forethought. The actual process of vulnerability assessments and internal control reviews will be discussed in detail but it should be pointed out that the former must be conducted at least biennially and the latter on a continuing basis.

C. SEGMENTING THE AGENCY

The success of the evaluation of an agency's system of internal control is dependent on the implementation of the process throughout the agency. Segmenting the agency into components for evaluation and reporting purposes will insure that implementation. As pointed out in the OMB guidelines, "There is no single method to divide an agency into components, programs, and administrative functions..." [Ref. 10]. However, there are fundamental principles that can be used to break an agency into components and programs. This results in an inventory of these items called assessable units.

When completing the inventory of assessable units things to be considered are:

1) Does the existing organizational structure provide a method for dividing the agency into assessable units?

2) What is the nature of the agency's programs and administrative functions, how are they sub-divided, do they cross organizational lines and what is their degree of independence?

3) What are the budget levels and the amount of personnel incorporated in the unit?

All of these are relevant to the segmenting process. However, of unique importance is whether a certain program or function operates in just one location or many. In the case where they operate in many locations, consideration must be given to identifying either the locations and then the functions within that location, or the functions first and then the locations. The method chosen is not important as long as it provides for complete coverage.

When segmenting an agency two primary considerations come to mind. First, the intent of the legislation is to improve internal control in the Federal Government. Therefore, the division of the agency should go to the lowest level of responsibility. This will insure that those personnel that actually perform functions or administer programs will have a greater awareness of internal controls and their implementation. Second, to comply with the legislation, the division of the agency must provide for the systematic evaluation of and reporting on the internal control system. This must include a provision for the review of the information gained by this evaluation as it flows up the organization. This allows each level of authority to evaluate any weaknesses and to determine if they are unique to one area or demonstrate a weakness that pervades their area of responsibility.

D. CONDUCTING VULNERABILITY ASSESSMENTS

Prior to the actual review of internal controls in an agency there must be a vulnerability assessment. This is simply a review of all the programs and functions determined in the segmenting process. The purpose of the review is to identify any of these programs and functions which are susceptible to waste, fraud and abuse. The vulnerability assessment does not evaluate the presence or effectiveness of internal controls. They are used to determine the potential for loss. An example would be a cash handling function where large amounts of cash are received, such as the turnover of worn out currency by banks. Since the value and amounts are large, there is a potential for loss due to theft or fraud. This potential would be diminished through effective internal controls. However, the vulnerability assessment should only establish the potential.

Each agency must conduct their own assessment of vulnerability and the responsibility for this is with management. Although personnel within the agency who perform audit functions can be used for technical advice and consultation, the actual work should be performed by all levels of management including the lowest possible responsibility level as determined in the segmenting process. There are three steps in the performance of a vulnerability assessment which will be covered in the following paragraphs.

1. Analysis Of General Control Environment

The vulnerability of a program or function to fraud, waste and abuse are influenced in a large part by the environment of the activity. This environment is created by several inherent factors within an agency, including:

1) The attitude of management concerning the use of internal control systems within their activity and the communication of that attitude to employees.

2) The structure of the organization. It should provide for proper evaluation and reporting of programs and functions to insure good control.

3) Personnel should be competent in their assigned duties and maintain a high level of integrity.

4) There should be delegation of authority within an organization that also provides the requisite responsibility and that authority and responsibility should be communicated to all cognizant personnel.

5) The policies and procedures of the organization and its activities must be spelled out through directives, standard operating procedures and the like to insure compliance.

6) The budgeting and reporting procedures used should reflect organizational goals and the level of the accomplishment of those goals.

7) There should be existing checks and balances within the organization. These should provide for financial control, internal auditing and other management controls. This is not an evaluation of controls but just the fact that they exist.

The evaluation of the general control environment should be carried out throughout the agency. This can be performed for the agency as a whole or for separate activities, programs and functions. The breakdown is determined by the size, nature and centralization of the area being evaluated.

In any case, the evaluation should be conducted by considering the policies and procedures used in the area, interviews with management and personnel, actual observation and the familiarity of the reviewer with the operation.

2. Analyses Of Inherent Risk

Following the evaluation of the general control environment each program and administrative program identified in the segmenting process should be analyzed for its inherent potential risk for fraud, waste and abuse. This is needed as programs or functions of high risk naturally require more control than those with low risk. The factors that should be considered include:

1) Purpose and characteristics of the program or function. Are they documented by directive, instruction, etc., and are they followed? Are there any aspects that lead to a higher risk?

2) The budget allocated to the program or function. If the level of funding or resources (such as personnel and property) is high, there is a higher risk involved.

3) Impact of the program or function outside the agency. Many programs or functions of the agency involve the public. A good example is the Social Security Program. This impact should be considered in evaluating the risk.

4) Age and expected life of the program or function. Stable programs are generally less susceptible to risk. New, changing, or programs being phased out have a higher risk due to the environment of change they are in.

5) The degree of centalization of the program or function. Is the level of centralization (or decentralization) appropriate for the activity involved?

6) Any special concerns of the program or function. Special attention received by an activity from the President, Congress, OMB, agency heads could indicate

a higher risk level. Also, attention from the press, pending litigation and any other special considerations should be evaluated for their impact on an activities potential for fraud, waste and abuse.

7) Prior reviews that may have been conducted of the program or function. Areas of vulnerability may already have been uncovered by other audits such as GAO, Inspector General, etc. If an activity receives little audit coverage or audits often result in disclosure of irregularities, then it may be more susceptible to risk.

8) The management responsiveness within the program or function. Does management respond promptly and effectively to audit findings? An activity where this is not the case should be considered a higher risk.

9) Any other factors considered to be significant.

3. <u>Preliminary Evaluation Of Safeguards</u>

The final step in the assessment of vulnerability is a judgment by the reviewer on the existence and adequacy of internal controls. This is not a comprehensive review but an evaluation based on the knowledge of the control system gained during the initial steps. Of primary importance is whether appropriate controls are operating to prevent or minimize waste, fraud and abuse.

The results of the vulnerability assessment should be summarized and documented to provide an overall evaluation of a program or functions vulnerability. The assessment should conclude whether a program is high, moderate or lacking in vulnerability. This information is used to develop a plan for the internal control review process.

E. CONDUCTING INTERNAL CONTROL REVIEWS

The process of evaluatinginternal control systems described so far is performed in preparation for the internal control review. This review is an in-depth examination of the system of internal controls (or lack of) that operate in the programs or functions identified in the vulnerability assessment. This review confirms that internal controls are in place, operating properly and in a cost-effective manner. The review is conducted using a six-step process detailed in the following paragraphs.

1. Identification Of Event Cycles

In this step, the programs and functions identified in the vulnerability assessment are broken down into their event or transaction cycle. An event cycle is the process that is used to accomplish the various objectives of a program or function. Most will have many event cycles. An example of a procurement program event cycle would include advertising for copetitive bids, protection of sealed bids prior to opening, evaluation of bids received and awarding of the contract in accordance with applicable regulations. Additional cycles would follow the completion of the contract, progress payments, etc. An administrative function example would be a payroll department. Beginning with proper authorization of employment, pay computed using only valid time cards, proper deduction for Federal and State taxes, separation of duties for personnel processing checks and those distributing them.

Each event cycle represents an area that should be examined for internal controls. Once all event cycles are identified in a program or function, they should be evaluated for their vulnerability to risk. This is accomplished using the information obtained in the vulnerability assessment and the judgment of the reviewer. If possible, all cycles identified should be reviewed but the highest priority rests with those considered most vulnerable. As with all the process steps, good documentation should be maintained.

2. Analysis Of The General Control Environment

The environment in which the internal controls to be reviewed operate plays a key role in their effectiveness. The analysis that is performed in the vulnerability assessment is used for this step but should be updated to reflect the current situation.

3. Documentation Of Event Cycles

In order for a reviewer to understand the process involved in each event cycle complete documentation of the cycle is essential. This is especially true where personnel completing the documentation and those performing the review are not the same. The understanding of the event cycle is gained by interviews with the personnel performing the cycle, review of policies and procedures followed and examination of the records, forms and reports maintained. The documentation of the cycle can be in the form of a narrative report or a flowchart of the process with pertinent comments. In

either case the finished documentation should be reviewed with actual personnel performing the cycle to assure that it reflects the cycle correctly. If necessary to evaluate the documentation a few transactions can be traced through the cycle. In subsequent reviews the documentation from prior reviews may be used, but it must be updated each time.

4. Evaluation Of Internal Controls

Using the documentation of event cycles from the previous step the internal control system (as understood) is evaluated to ascertain if it fulfills the requirements established by the Federal Managers' Financial Integrity Act and OMB Circular A-123. These include:

1) Reasonable assurance that obligations and costs are in compliance with applicable law.

2) Agency funds, property and other assets are properly safeguarded.

3) Revenues and expenditures are properly recorded to permit the preparation of reliable financial and statistical information.

The first step of this evaluation is to define the control objectives for each event cycle. Control objectives are defined in Chapter II but basically consist of the purpose the control system or mechanism is meant to accomplish. These objectives should be documented and reviewed to establish the objectives for each cycle are complete, relevant and make sense.

After the objectives for an event cycle have been defined the documentation is reviewed to establish the

presence (or lack of) control techniques. Control techniques are defined in Chapter II but basically are the processes or documents which enable the control objectives to be met. As always proper documentation of the control techniques is required. This documentation is reviewed to determine if the control techniques incorporated provide reasonable assurance that the control objectives are met.

The inherent risks in an event cycle, the control objectives and control techniques form an inseparable relationship. A very good example is a cycle for accounts payable. An inherent risk in this cycle would be the payment of invoices for goods not received. The control objective would be that accounts would only be paid after receipt and inventory of goods. The control techniques that would insure that the objective is meant would include receiving and inspection reports which the accounts payable department would receive and compare with vendor invoices prior to payment. Proper separation of the duties of receiving goods and paying for invoices would also be an appropriate technique in this example.

The final results of the evaluation of internal controls should identify those that require testing, the absence of controls that should be corrected and excessive or unnecessary controls that could be eliminated.

5. Testing Of Internal Controls

In the review process the final step is the testing of those controls identified in the evaluation to determine

if they are functioning as required. The primary testing of internal controls is the selection of a sample of transactions (generally by statistical methods) and then following the documentation of each transaction to ascertain its compliance with the internal control in question. In addition, observations of controls functioning and interviews of personnel involved can be useful. When control techniques being tested appear to be inadequate or non-functional, an evaluation of personnel performing the cycle should be made to determine if they are compensating for the control weakness. Other techniques also might compensate for the control in question. The review should provide documentation for any control weaknesses that were uncovered and possible corrections for them.

6. Reporting The Results Of Internal Control Reviews

After completion of the review of internal controls the results must be summarized and reported on. There are two reports that are required. The first report is designed to provide management of the program or function with information concerning control weaknesses uncovered and possible corrective action to be taken. The second report is designed to provide the agency head with information for the preparation of the annual statement to the President and Congress. This report will include the fact that the internal control review was conducted and any material weaknesses uncovered.

F. CONCLUSION

The guidelines for the evaluation of internal control systems provided by OMB are complete through the review

process. Personnel who have received training in internal control reviews should be able to implement them. However, the guidelines do not provide for the evaluation of control weaknesses in regard to materiality. This area will be covered in the following chapters.

IV. THE CONCEPT OF MATERIALITY

A. INTRODUCTION

After the system of internal controls has been evaluated, and any weaknesses uncovered, a determination must be made as to the materiality of the weakness. This is required so the agency head can report to the President and Congress on his/her system of internal control in their annual report. However, this is much easier said then done. The primary obstacle to this determination is the lack of clear guidelines as to what constitutes a material weakness. This chapter will examine the concept of materiality both in the private sector, and in the Federal Government. Finally, an attempt to integrate these two concepts will be made.

B. THE ILLUSIVE CONCEPT

The Random House College Dictionary defines something that is material as "of substantial import; of much consequence; important..." [Ref. 11]. This is a broad definition, but provides no insight on how to apply the concept. The problem lies not in the definition, but in the application. To paraphrase a U.S. Supreme Court Justice's comment on obscenity, "We can't define materiality, but we know it when we see it." It is clear that something that is material, is important, but to whom?

A simple example illustrates that everyone has a different concept of what is material. A poor man walking down a sidewalk

spots a five dollar bill. The man, knowing it will put food on the table, quickly grabs it, and stuffs it in his pocket. To this man, five dollars and possibly less is very material. Another man, this one wealthy from an inheritance might pass this five by. Indeed, he might use five dollar bills to light his cigars. To this man, five dollars is immaterial. Now let's go back to the first man, only instead of being poor, imagine that he has taken a vow against materialism and lives in proverty by choice. This man may well pass the five dollars by as money is immaterial to him. Finally, imagine that the wealthy man became so by working his way up from nothing. Since this man knows the value of a dollar, he will scoop the bill from the sidewalk even though the five dollars is insignificant relative to his personal fortune. In this one example we can observe four quite different interpretations of materiality.

From the simple example of the five dollar bill we can see that materiality is subject to judgment. In this example the element being evaluated was money. Even though it could be quantified in amount and its value known (in spending power), each person evaluated its materiality from a different viewpoint. The materiality of the five dollar bill could not be ascertained without knowing the personal value each person placed on it. By itself, the five dollar bill had no indication of its materiality.

It is this personal judgment, a necessary requirement to make decisions of materiality, that makes it an illusive concept. In financial accounting, the materiality concept has basically two applications. One involves the content of financial statements, while the other is concerned with the auditing of internal controls. Each of these meanings will be examined in the following paragraphs.

C. MATERIALITY IN PRIVATE SECTOR FINANCIAL STATEMENTS

On an annual basis most businesses in the private sector are required to prepare statements of their assets and liabilities (Balance Sheet), revenue and expenses (Income Statement) and other statements to provide information on the state of their business. These statements are collectively called the financial statements of a business. After the preparation of statements, many businesses undergo an audit by a Certified Public Accountant (CPA) in order to verify the validity of their financial statements. This is done to satisfy many different parties including investors, creditors, boards, Federal and State agencies, etc. The goal of the CPA in his or her audit, is to determine if the financial statements fairly present the financial position of the business for the period that they represent. One of the major concerns of the CPA in regard to an audit of financial statements is that there are not any misstatements in the audited financial statements that would be considered material. However, the problem of what constitutes a material misstatement,

to whom it is material and what effect the misstatement will have are not easily solved.

1. Users Of Financial Statements

The ultimate party that uses the information contained in financial statements should determine what constitues a material misstatement. As pointed out in Arthur Andersen and Company's Objectives of Financial Statements for Business Enterprises:

> Financial statements are for users--not directly for preparers, and certainly not for auditors. But, who are the users? What do they want? And what do they have a right to expect from financial statements? [Ref. 12]

The job of the CPA then, in performing the audit, is to consider the end users and set the level of materiality accordingly. In a business that is privately held (no stock is bought or sold outside of the company), this level would be indicated by the Board of Directors, regulatory agencies and creditors. In a publicly held company, the investors and potential investors in the business would also indicate the level of materiality to be considered.

2. Information Required By Users Of Financial Statements

Once the users of the financial statements have been identified, the CPA can determine what information they need. In the case of creditors, their primary interest is the ability of the business to repay their debts. On the other hand, the investor is looking for a return on their investment. Boards of Directors are assessing the performance of the officers of the business while regulatory agencies are concerned that the business is in compliance.

Each user of the financial statement is concerned with their own interests. While some users are trained in accounting principles and have the financial expertise to properly evaluate financial statements, many (primarily small investors) have limited knowledge in these areas. The Securities and Exchange Commission has defined the materiality of information for investors as that information "required to those matters about which an average prudent investor ought reasonably to be informed" [Ref. 13]. Unfortunately, words like "average," "prudent" and "reasonable" are just as ambiguous as what they are meant to define.

If the financial statements include the information that the average investor or user needs, then a misstatement in that information that would be material would be such that the user would make an incorrect decision based on that information. In addition, the mistake would have a material consequence to the user. For example, financial statements which overstate assets might cause a creditor to loan more money to a business than they can provide security for. If that business subsequently goes bankrupt, and the creditor can not recover the value of its loan because the assets were overstated, then the misstatement was clearly material. Thus, the information that users require, is that which allows them to make decisions regarding the business, with reliability that the information is accurate enough to preclude incorrect decisions.

3. Standards Of Materiality In Financial Statements

The financial statements of a business report on financial, external and internal aspects of the business. These aspects are reflected in the actual numbers and amounts presented, footnote disclosures and the opinion of the CPA. The standards for what represents materiality in the financial statements are set by the nature and interrelationship of these aspects coupled with the user requirements. The following will illustrate the financial, external and internal aspects through actual cases.

a. Financial Aspects

The financial aspects of financial statements are the actual accounts presented in the statements and their interrelationship. The standard for materiality in these accounts varies depending on the size of the business. It should be obvious that a large firm would not consider the same dollar amount to be material that a small one would. For this reason, percentages of some base, are normally used to establish the degree of materiality. In many cases the percentage is varied based on what type of account is being looked at. For example, the income statement could be evaluated on the basis of what percentage of income the deviation in an account represented. A case from the not too distant past highlights this aspect.

The Rockwell International Corporation suffered substantial losses through a computer leasing fraud they

entered into with OPM Leasing Services. The losses were not revealed in Rockwell's annual financial statements because they were deemed immaterial. At the time the assets of Rockwell amounted to 7.4 billion dollars. It was reported that the company's auditors (Deloitte, Haskins & Sells) had stated that fraud-related losses might not be considered material if they were less than 10 percent of shareholder equity. In Rockwell's case, this meant that the loss could go as high as 220 million dollars.

Although the amount indicated as being immaterial in the Rockwell case most likely would boggle the mind of the average investor, this type of determination continues to be made on a regular basis. Underlying this is the concept that the business is an ongoing concern. If a company can sustain a loss similar to this and maintain normal operations, it probably is immaterial.

b. External Aspects

Every business is affected by the environment it finds itself in. Some factors of that environment the business can control. These include the type of industry that they operate in, marketing area and the like. Other factors are not under the control of the business. These include government regulations, market response, competition and the like. Any of these factors can and do impact on the company and should be reflected in the financial statements if they are material. In some cases these factors would be disclosed by

footnotes to the financial statements. An example would be a change in depreciation method that could change the income (or loss) of the business. Some factors require adjustment of account balances, such as an adjustment for a loss in the value of inventory. Where a factor exists that creates a potential liability for the business, such as a pending lawsuit, the establishment of a liability account is required.

The following case provides a good example of the effect of external factors on a business. In the early seventies there was a tremendous boom in the sale of Citizen's Band (CB) radios. Many companies (both established and new ones) rushed into production to meet the demand for these radios. One such company, Hy-Gain, was extremely successful in this regard. For a few years business was quite good, profits were made and inventory stockpiled. Then the Federal Communications Commission (FCC) surprised the industry by announcing the implementation of 17 new channels.

With the advent of new 40 channel CB radios, Hy-Gain was faced with a large inventory of potentially unmarketable 23 channel radios. At least that was the position taken by the manager in charge of their annual audit by Touche Ross & Company. She believed that the market for 23 channel CB radios was so limited, that the inventory of Hy-Gain should be substantially marked down. The management of Hy-Gain, understandably concerned about how investors and creditors would react to this move, argued against it. They insisted

that the 23 channel radios could be marketed at close to full value. In the end, management convinced the audit partner to follow their lead and there was no write down. Subsequent to this, the market for 23 channel CB radios collapsed and Hy-Gain along with it.

In this case, the external factors of regulation and market response combined to cause a material impact on the financial statements. However, because management interpreted the effect of the regulation to be immaterial (or wanted it to be), the financial statements were misstated. The auditors were not held accountable for failing to state the materiality of the situation. This is because the factor that caused the misstatement, the market response, was external and in truth, could not be predicted reliably. The private sector recognizes that some degree of uncertainty cannot be eliminated.

c. Internal Aspects

The information reflected in the financial statements of a business quite often are affected by factors from within the business. These could include accounting practices, management attitude and especially internal controls. Changes in accounting practices usually are reflected in footnotes to the financial statements and include their impact on account balances. However, the attitude of management normally is not reflected in the financial statements. This is because they reflect the financial position of the firm and not its

direction or potential. Internal controls are also not reflected directly in the financial statements, but do play a very important role in the CPA audit, which will be covered later.

The impact of internal factors on a business can be significant, as the following case points out. Very recently, the scandalous conduct of the top executives of Frigitemp has been revealed. These executives actually defrauded their own corporation, their CPA (Arthur Andersen & Company), other corporations and the Federal Government. Through the collusion of other executives, bribes to officials of other corporations and extremely clever defalcation schemes, the executives at Frigitemp were able to practice their fraud for some time. This resulted in the absence of relevant and material information from the financial statements of Frigitemp. In fact, the company went bankrupt as a result of the fraud. Indeed, it was bankruptcy which finally brought their conduct to light.

This case brought several questions to light, such as what responsibility do the CPA's have to uncover fraud such as this. The answers will be decided in the courtroom and in Congress. However, it does highlight the fact that internal factors can be very material to the financial statements.

From the previous paragraphs, we can conclude that the definition of what is material to the financial statements

of a business is the subject of much confusion. In an audit of financial statements, the deciding factor rests with the judgment of the CPA. However, the CPA must keep in mind that should his or her judgment be questioned, the courts may be called upon to decide. Even though there has been much discussion in the accounting profession about the need for official guidelines for materiality, none have been forthcoming. This is primarily because of the inability to quantify many dissimilar entities into set standards. The CPA is educated, trained and experienced in evaluating the materiality of information within the financial statements. They (CPA's) must make judgments on materiality and be liable for them.

Although the CPA's have been making judgments on materiality for many years their performance has recently come under attack in Congress. In an interview published in Management Accounting, Representative John D. Dingell was quoted as saying:

> I'm not sure whether the public perception of the narrowness of the accountants' responsibility is the same as the accountants'. The accountants say they cannot catch fraud. We found some instances where we can reasonably believe that accountants in the ordinary exercise and skills of their trade, or just reasonable prudence, should have uncovered fraud...I find it very curious, for example, that one day a corporation gets a clean bill of health and within one or two days thereafter it collapses... [Ref. 14]

There is a growing feeling in Congress that the CPA's should be held accountable for more than the verification of the fairness of the financial statements in their audits. Emphasis in areas such as the operational control (management) of

the business would be new for the CPA's and would require a shift in their perception of materiality.

D. MATERIALITY IN PRIVATE SECTOR AUDITING

While the auditor is ultimately concerned with the financial statements and their fair presentation of the financial position of the business, they have different viewpoints while conducting their audit. This is because situations which would not be material individually to the financial statements may result from a larger problem that would. Therefore, the auditor must consider materiality in evaluations of internal control, compliance testing, audit procedures and the like. Every aspect of the audit must be consisered for its materiality.

The auditor is concerned with many aspects of materiality in the conduct of the audit. These include the financial, external and internal aspects mentioned before, as well as economic, legal, psychological and philosophical aspects. Given the nature of these aspects, it appears that the materiality in auditing is also hard to define. Indeed, in an article of the Journal of Accountancy on guidance for auditors the authors wrote:

> It is unlikely that reliance on simple rules of thumb such as some percentage of income or some percentage of any other financial disclosure will lead to truly professional materiality judgments in specific audit situations. [Ref. 15]

Although by no means a concise guide to materiality decisions, the Auditing Standards Board of the American

Institute of Certified Public Accountants has recently released a new statement on materiality in auditing. It includes guidance for materiality in the conduct of, planning for, and the evaluation of an audit.

1. <u>Materiality In Conducting An Audit</u>

The recent Statement on Auditing Standards (SAS) number 47 [Ref. 16], provides guidance to the auditor on materiality when conducting an audit. The SAS includes comment on what is termed "audit risk". The meaning of audit risk is derived from the fact that the auditor gives his or her opinion on the financial statements of a business. Therefore, the auditor has a risk that the audit, and the opinion given based on that audit, might not reveal a material misstatement. Accordingly, the auditor must evaluate each potentially material deviation in the audit in relation to its impact on his or her audit risk.

The auditor's primary goal in performing the audit is to satisfy him/herself that the financial statements are fairly presented in accordance with generally accepted accounting principles (GAAP). This occurs if the statements taken as a whole are not materially misstated, by errors or irregularities which might individually or in the aggregate result in misinformation. These errors consist of misapplications of GAAP, departures from fact, or necessary information being omitted.

While performing the audit, the auditor should consider the nature and amount of both the errors and irregularities detected as well as the item being examined and their relation. Based on the auditor's perception of user needs and his or her professional judgment, determinations of materiality can be made in light of the surrounding circumstances. It should be recognized that these decisions involve both quantitative and qualitative factors. As pointed out in SAS Number 47:

> ...errors of relatively small amounts detected by the auditor could have a material effect on the financial statements. For example, an illegal payment of an otherwise immaterial amount could be material if there is a reasonable possibility that it could lead to a material contingent liability or a material loss of revenue. [Ref. 17]

The basic guidance is that materiality decisions should be made based on an understanding of the situation using professional judgment.

2. <u>Planning The Audit</u>

In an audit of a business, the auditor first considers materiality and audit risk when planning for the audit. This is especially true in light of the inverse relationship between audit risk and materiality. For example if the account or transaction cycle being evaluated has a low risk of a large material misstatement, it could have a high risk of a small misstatement. Therefore, all things being equal, a decrease in either the level of acceptable risk or the level of materiality will result in a need for additional audit planning.

The planning that the auditor does for the audit centers around the collection of sufficient evidence to evaluate the financial statements. To collect that evidence he or she must select appropriate audit procedures in light of the audit risk and materiality involved. The auditor must first make a preliminary judgment of materiality for the audit based on his or her experience and knowledge of the entity. The audit plan is then developed with this preliminary materiality level to provide the evidence required to evaluate the financial statements. The audit process itself has inherent limitations that also must be considered. Of primary consideration is the desire for the audit to be economically useful. That is, performed in a reasonable amount of time for a reasonable cost.

After consideration of the materiality for the audit of the financial statements, the auditor must consider what level of materiality he or she will use in the evaluation of specific accounts, transactions or controls. This is important because an error that might not be material individually <u>may be material as the sum or errors from other accounts</u>, transactions or controls. This will assist the auditor in determining the scope of audit procedures required. According to SAS 47, there are three risks that the auditor must consider when planning for the audit. These are inherent risk, control risk and detection risk.

The <u>inherent risk</u> is the susceptibility of an account or transaction type to material error, when aggregated with

error in other accounts or transaction types. <u>Control risk</u> is the risk that this same error could occur and not be prevented or detected by internal control systems. Where the inherent risk is high, the control risk should be low and vice-versa. However, these risks are not normally under the control of the auditor. The <u>detection risk</u> is under the auditors control and is the risk that the procedures conducted in the audit, will lead him or her to believe that no error exists, when in fact it does. Therefore, in audit planning the auditor should plan to lower his detection risk by using more effective audit procedures when the inherent or control risk is high. The converse is true when inherent or control risk is low.

Throughout the planning of the audit, the auditor must continuously evaluate his or her level of materiality. This evaluation is based on professional judgment taking into account the users of the financial statements. In the final analysis, it is the auditor's opinion as to whether the financial position of the business is presented fairly.

3. <u>Evaluation Of The Audit</u>

After the conclusion of audit procedures, the information obtained must be evaluated in light of the materiality level. If the errors detected (whether individually or in aggregate) are material to the financial statement as a whole, then they must be corrected or a qualified or adverse opinion must be given. Once again, the errors must be

evaluated using both quantitative and qualitative considerations. If analytical review techniques have resulted in an indication of error, the auditor should use additional procedures to estimate the error. In any case, where estimates are used in lieu of factual data, a determination should be made as to the materiality of an error between the estimate and actual.

Another area of consideration is the likelihood of errors. That is, where no errors have been detected, there still is a possibility of misstatement due to detection risk. Where this is a concern after completion of the audit, additional procedures should be employed to lower the detection risk. The final evaluation of the audit rests with the auditor, who determines if he or she has sufficient evidence to support the financial statements.

E. MATERIALITY IN THE FEDERAL GOVERNMENT

Although the Federal Government maintains many audit agencies, both in the Executive branch and the Legislative branch, as well as at the agency level, there is not much emphasis on the concept of materiality. Indeed, the Comptroller General's book of standards for governmental audits defines materiality as:

> The concept which refers to the significance of an item of information which could appear, does appear, or does not appear in a financial statement. [Ref. 18]

While not unsound, this definition does not shed much light on what materiality means but evidently leaves that decision

to the judgment of the auditor. For practical purposes, most governmental audit agencies enjoy a reputation of considering anything material, as they include any weaknesses uncovered in their audit reports. The following section attempts to use the concept of materiality in the private sector to develop one for the Federal Government.

In the Federal Government, traditional accounting controls can be evaluated for materiality in much the same manner as in the private sector. The financial aspects of accounts, transactions, etc., can be evaluated using percentages of some base. Likewise, internal and external aspects can be evaluated along the lines of the private sector. However, the Federal Government is held to a higher level of stewardship than the typical private sector firm because it serves the public trust. This must be remembered when considering materiality in the evaluation of internal and administrative controls in the Federal Government. The nature of the services provided by an agency, who is affected by them and how, is an important aspect of this evaluation.

1. <u>Output Of The Federal Government</u>

Most agencies of the Federal Government provide services and information which affect a wide range of interested parties. (This relationship is illustrated by Figure 1.) This may be in the form of reports like the annual internal control statement required by the Federal Managers' Financial Integrity Act. It may be information used by other agencies,

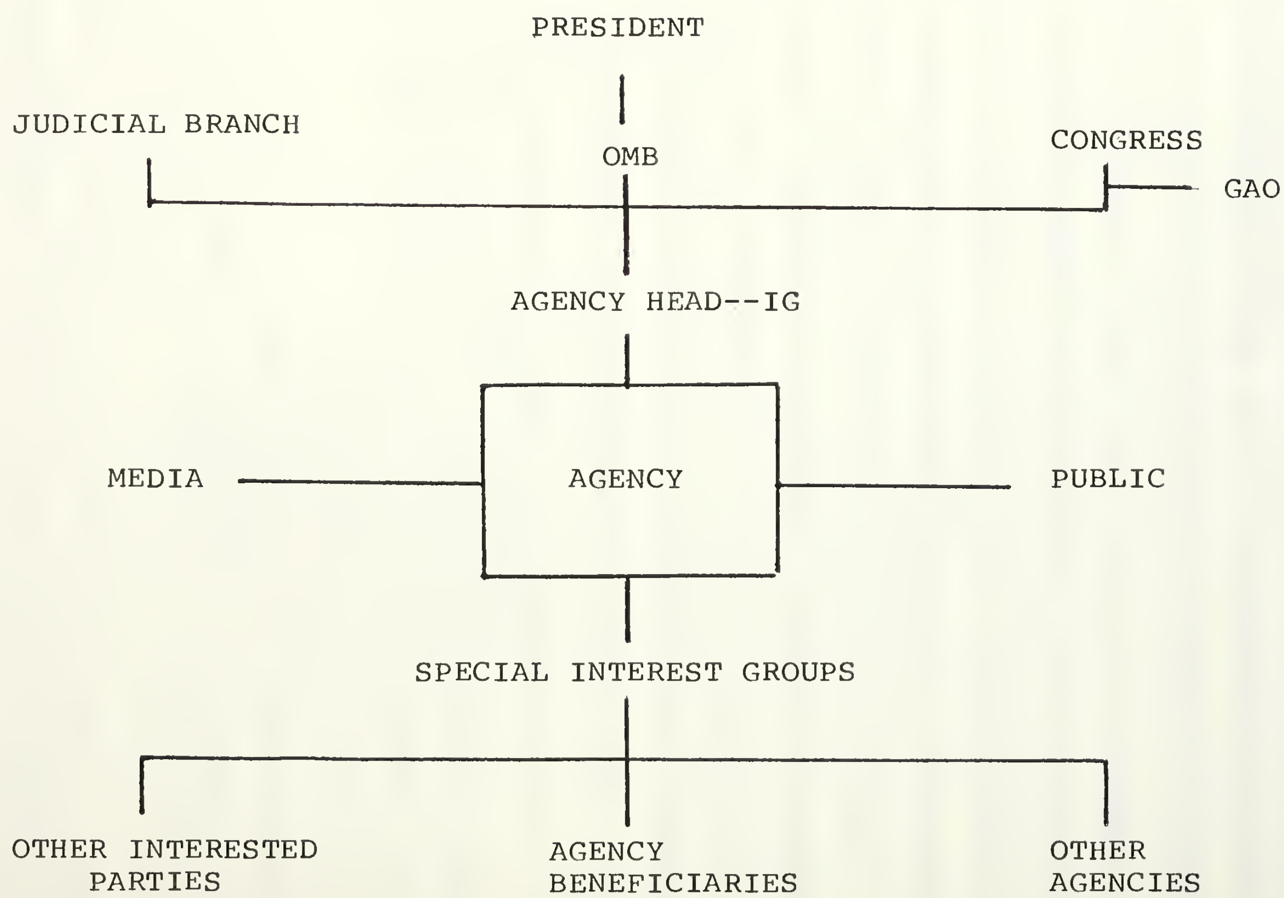


Figure 1. Example of Interested Party Relationship

contractors, reporters, the public, etc. The effect that these services and information have on the interested parties may be direct, indirect, or a combination of both. Several examples of direct services are:

1) Delivery of mail by the U.S. Post Office.

2) Entitlement programs such as Food Stamps and Social Security.

3) Weather forecasts by the National Weather Service.

4) Collection of taxes by the Internal Revenue Service.

Some services have both direct effects and indirect effects. Examples of these are:

1) Air traffic control by the Federal Aviation Agency.

2) Control of TV and radio broadcasters by the Federal Communications Commission.

3) Crime prevention by the Federal Bureau of Investigation.

Finally, some services are indirect in nature and do not generally have a direct impact that is measurable. Some examples of these are:

1) National Defense by the Department of Defense.

2) Diplomatic work by the Department of State.

3) Monetary policy exercised by the Federal Reserve Board.

Whether direct or not, the services and information provided by most agencies affect the parties that are interested in them. In order to develop a concept of materiality, these interested parties, their views and attitudes should be considered.

2. <u>Identifying Interested Parties Of The Agency</u>

In the private sector, the users of financial statement information affect the level of materiality used in the evaluation of those statements by the auditor. In the Federal Government, the parties interested in the agency, their views, attitudes and impact on the agency should be considred in setting a level of materiality for internal control evaluation. These interested parties include those that benefit from a service, special interest groups, audit agencies, the courts, other agencies, Congress and the President, to name a few. In addition, since the effectiveness of an agency may be decreased by adverse publicity, the news media must be considered an interested party. The public at large is also an interested party, because we live in a democratic society with a relatively unlimited flow of information concerning public resources.

3. <u>Identifying The Impact On Interested Parties</u>

Once an agency has defined the group of interested parties it affects, it can start considering the impact of the services and information the agency provides on them. This is done by evaluating the views, attitudes and concerns of the parties. Several examples of this process follow.

a. Parties Who Benefit From Agency Services

Those parties which receive a service from an agency are concerned with anything that limits or deprives them of that service. An example would be the U.S. Post

Office and the delivery of mail. If a weakness prevented the fulfillment of the mail delivery mission, the parties who benefit from mail delivery would be concerned.

b. Parties Who Control The Agency

Every agency is under the control of managers, regulatory bodies, audit agencies, the courts, Congress and the President, among others. If there is any weakness that indicates a breakdown in control to these controlling parties they will be concerned. An example would be the recent spare parts problem ($500 hammers, $600 toilet seats, etc.) in the Department of Defense. This situation has caused increased attention from Congress, the GAO and other groups. This may result in reduced levels of funding, tighter regulation and other restrictions. This results from the apparent lack of control by the parties that control the agency which allowed a situation like this to develop.

c. Interested Parties In The Press And Media

Most agencies in the Federal Government receive the attention of the news media. This is especially true when weaknesses are uncovered. This is because the media considers poor management in the government to be news. The spare parts problem in DOD is again an excellent example. When this was uncovered, it received substantial coverage by the media. Of course, the media coverage caused an impact on those who control the agency and so there was a domino type effect from the coverage. Generally it is safe to assume if an item is newsworthy, the media will give it their attention.

d. The Public At Large

The democratic society in America gives each citizen an interest in the affairs of the Federal Government. In addition, there is a vast amount of information available to the public about government affairs. While the average citizen may not be affected by an agency, they may still have an interest in the agency. The impact on the public from an agency weakness may result in a decrease of public confidence. This in turn may result in interest from those who control the agency and the media. The DOD spare parts problem is again an excellent example. While the public may not understand complex defense issues, they do perceive that $500 is too much to pay for a claw hammer that is similar in all respects to one at the local hardware store that sells for $10. The concern of the public at large cannot be underemphasized.

e. Other Interested Parties

An agency of the Federal Government may have an impact on groups that are not normally associated with it. These may include foreign governments, special interest groups, local organizations and the like. If these other groups can be identified, the impact of possible agency weaknesses on them should be evaluated.

4. <u>Developing Standards Of Materiality</u>

The standards that should be used for materiality in the Federal Government should be developed considering the

interested parties. When possible they should be quantified and expressed in dollars. However, in many cases the standard will be subjective and judgment will have to be the sole consideration. Within an agency the standards may vary down the organizational line and all but the smallest agencies should not set overall guidelines. Rather, the segments of the agency should develop their own standards of materiality within the framework of the services they provide and how they affect interested parties. Although an overall materiality guideline can be promulgated by the agency, this guideline should only be used to evaluate materiality for the agency as a whole.

F. SUMMARY

The concept of materiality in the private sector is used by professional auditors (CPA's) to evaluate the presentation of a business's financial statements. The level of materiality is based on standards developed with the user of the financial statement in mind. (What would the user consider to be material?) Armed with these guidelines, the auditor develops an audit plan that will provide him or her with sufficient evidential matter to evaluate the financial statements. This evidence will allow the auditor to conclude if there are any material misstatements. The levels of materiality are adjusted by the auditor to include the risk that using a certain level, the auditor might let a material error go undetected.

Rather than being strict guidelines, the materiality levels used by the CPA are fluid and dynamic. The professional

judgment of the CPA must be used to make these determinations. The auditors that make these judgments typically have 4 to 5 years of college with an accounting major, pass a grueling qualification exam and generally have 5 or more years of audit experience. In addition, most auditors making materiality decisions have substantial experience with the business they are evaluating.

Each audit requires a different perspective of materiality that varies with the business, users and even the auditor. Indeed, a study of materiality decisions made by professional auditors concluded "that individual differences emerge both in the choice of factors used by auditors to rank materiality... and their materiality thresholds" [Ref. 19]. Even though there has been continuing discussion of establishing uniform standards for materiality over many years, it seems that the nature of the concept will not allow it. However, the growing emphasis on a higher level of accountability will force the CPA's to reevaluate their perception of materiality in their approach to an audit.

The concept of materiality in the Federal Government, while similar in some respects to that of the private sector, must be applied differently. In addition to the typical financial, internal and external aspects, the stewardship of the agency to interested parties must be remembered. The responsibility that agencies have as a result of this stewardship will always be higher than that of businesses in the

private sector. The application of materiality therefore must reflect that higher responsibility.

V. DETERMINING MATERIAL WEAKNESSES IN INTERNAL CONTROL SYSTEMS

A. INTRODUCTION

The final process in the evaluation of internal control systems for the Federal Managers' Financial Integrity Act, is the determination of material weaknesses. Any weaknesses that are deemed to be material and significant to Congress or the President must be included in the annual report. The OMB Circular A-123 defines a material weakness as:

> a situation in which the designed procedures or degree of operational compliance therewith does not provide reasonable assurance that the objectives of internal control specified in the Act are being accomplished. [Ref. 20]

In the previous chapters, the difficulty of applying this concept of materiality to the determination of material weaknesses was brought out. The principle of reasonable assurance tends to confuse the materiality issue. As defined in a prior chapter, reasonable assurance means that the benefit derived from the control exceeds the cost of the control. It seems that a correlation can be drawn between the concept of audit risk in the private sector and the concept of reasonable assurance as used in the above definition of materiality.

In addition to the guidance given in OMB Circular A-123, the Committee On Government Operations of the United States Congress has provided their guidance. In a report on first-year implementation of the Act, the committee cautioned

against the exclusive use of the financial accounting definition of materiality. They stated:

> ...the Committee is concerned with the lack of consistency in agencies' implementation of the reporting requirements. Consistent understanding of the meaning of material weakness and full reporting of material weaknesses is central to achieving the accountability envisioned by the Act. The Committee believes that a management deficiency should be considered a material weakness for purposes of reporting under the Act if it could impair fulfillment of an agency's mission, deprive the public of needed government services, violate statutory or regulatory requirements, or result in a conflict of interest. [Ref. 21]

The purpose of this chapter is to attempt to integrate the concept of materiality in the private sector, that of the Federal Government and the desire of Congress into a workable guideline for the determination of material weaknesses.

B. REASONABLE ASSURANCE AND AUDIT RISK

Audit risk as used by the auditor in the private sector is the risk that the audit, and the opinion given on that audit, might not reveal a material misstatement in the financial statements of the business being audited. In cases where the possibility of a material misstatement is low, the audit risk is low and vice versa. The private sector auditor determines the scope and nature of his or her audit procedures based on an assessment of audit risk. If the assessment or audit risk is high, the scope and nature of audit procedures is increased and vice versa. There appears to be a similar correlation between the materiality of an internal control weakness, and reasonable assurance in the Federal Government.

For each area of internal control being evaluated in the Federal Government, the amount of assurance that is considered "reasonable" varies. For example, in the case of a control dealing with the safeguarding of nuclear weapons, the amount of assurance considered reasonable would be absolute assurance. In other words, any weakness in that control would be material. On the other hand, a control on ball point pens might give reasonable assurance, and sill allow an immaterial amount of loss. Therefore, in cases where the reasonable assurance that is desired from the control is high, the materiality threshold drops and vice versa. This principle, along with those developed in previous chapters, will be used in the guidelines for material weaknesses.

C. GUIDELINES FOR MATERIAL WEAKNESS DETERMINATION

Materiality decisions in the private sector are made by trained professionals with substantial experience in the field. The decisions being made in the Federal Government are made by line managers with limited training and experience in this area. For this reason, a systematic "cookbook" type approach should be used. This approach begins after the identification of weaknesses in the internal control review phase noted in Chapter III. Once the internal control weaknesses have been identified, they should be evaluated using the following process.

1. Area Subject To Internal Control

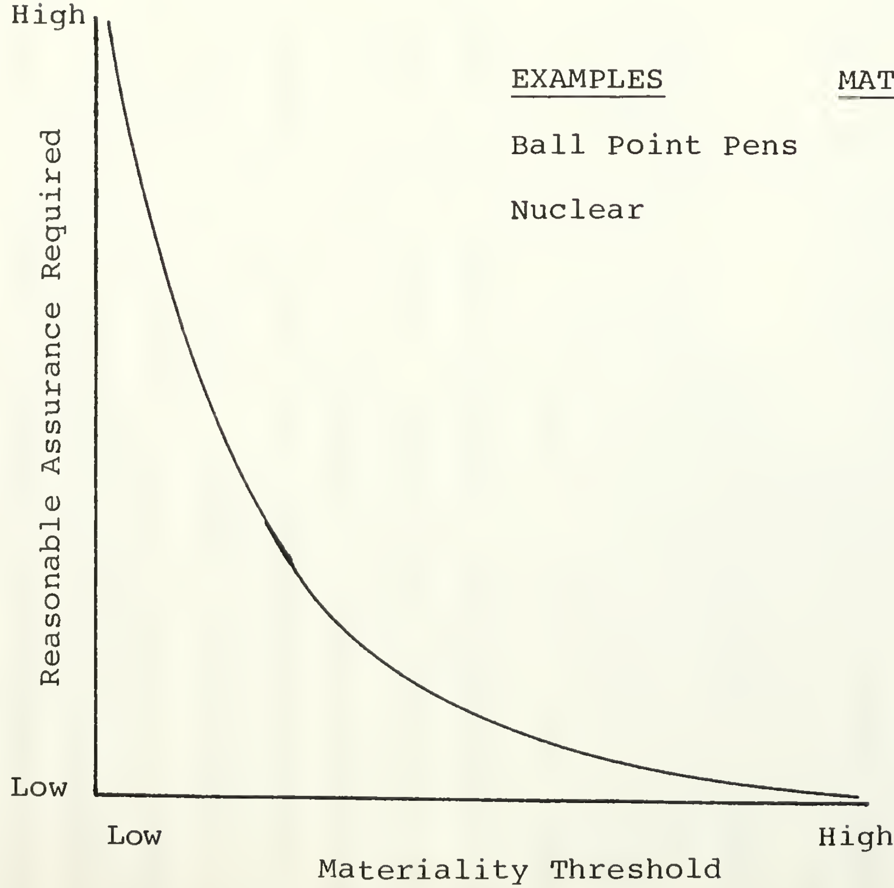
The first part of the weakness evaluation is a judgment on the sensitivity of the area subject to the control. This is where the reasonable assurance principle applies. If the area is very sensitive, such as nuclear weapons, the amount of assurance required is high. The determination is critical, because the level of materiality rests with the amount of reasonable assurance required. (This inverse relationship is graphically illustrated in Figure 2.)

2. Result Of Weakness In Control

This step involves an evaluation of what could result from the control weakness. If possible this result should be quantified. If not, then a narrative description of the result should be prepared. This step would also include a judgment as to whether the weakness impairs fulfillment of the agency mission, deprive the public of needed government services, violate statutory or regulatory requirements, or result in a conflict of interest. This step determines only the possible results but not the likelihood of those results.

3. Likelihood Of Results From Control Weakness

After determining the possible results from a control weakness, the likelihood of those results occurring must be assessed. This judgment can be made based on statistical methods, prior experience or any method that can reliably estimate the likelihood. If there is little or no potential for the resutls to occur, the weakness is probably immaterial.



EXAMPLES	MATERIALITY	REASONABLE ASSURANCE
Ball Point Pens	Low	High
Nuclear	High	Low

Figure 2. Relationship Between Materiality and Reasonable Assurance

However, if the reasonable assurance required by the control area is high (e.g., nuclear weapons), then even a small likelihood could be material. In this case additional evaluation is necessary to ensure the weakness is not material.

4. Parties Affected By Control Weakness

At this point the focus of the evaluation changes from the weakness to those affected by the weakness. These parties include all those listed in Chapter IV as interested parties. In addition to the identification of these parties, the effect of the control weakness on them must be evaluated.

a. How Are Parties Affected

For each category of interested parties identified, a determination of how they are affected must be made. This does not have to be specific, but only to what extent the party is affected. In the case of the media, the effect might range from no press interest to nationwide television coverage. Similar correlations to this should be made for each category of interested party. At this step, if there is no effect from the control weakness on the parties identified, the weakness probably is not material.

b. Reaction Of Interested Party

If the interested party is affected by the control weakness, then their reaction must be evaluated. This also does not have to be specific but can range from no reaction to extreme reaction. Although there is a connection between the effect and the reaction, they should be evaluated

separately to ensure that they are considered separately. Even some weaknesses with little effect can provoke an extreme reaction.

c. Impact Of The Reaction Of Interested Party

It there has been a determination that the interested party will be affected by the control weakness and have a negative reaction to that effect, the impact of that reaction must be evaluated. In the case of a controlling party like Congress, will the reaction result in reduced funding for the agency? In the case of the public, will the reaction result in distrust? Will the ability of the agency to fulfill its mission be diminished? These areas and more must be considered in this judgment.

5. Results From Material Weakness Guidelines

Once the control weakness has been evaluated using these guidelines, a judgment on the materiality of the weakness can be made. If the weakness is in a control area that requires a high reasonable assurance, and there is a high probability of adverse results, it is definitely a material weakness. Conversely, if it requires a low reasonable assurance, and there is a low probability of adverse results, it is definitely not a material weakness. Any weaknesses that lie somewhere between these extremes, are subject to the judgment of the evaluator as to their materiality. However, the process of using the guidelines to evaluate the weakness will enhance the evaluator's knowledge of the weakness, and subsequently his or her judgment.

D. IMPLEMENTATION OF GUIDELINES FOR MATERIAL WEAKNESS DETERMINATION

In most evaluations of internal control systems, a checklist type form is used. This form is adapted to fit the system being evaluated and often is specifically written for each control. This technique insures that the evaluator performs each and every step of the review process. This same technique should be used for the evaluation of material weaknesses. A sample checklist is included as Appendix A of this thesis.

The sample checklist is designed to be used once a weakness has been identified, and is based on the guidelines in this chapter. The checklist contains a 12-step process that helps the evaluator determine the materiality of a weakness. Those steps include:

1. <u>Area subject to control</u>. An assessment is made on how sensitive the area being controlled is to risk. Once the sensitivity is evaluated, the reasonable assurance required by the control can be determined.

2. <u>Possible results from the control weakness</u>. A determination is made on the possible outcomes from the weakness in internal control.

3. <u>Likelihood of possible results from the control weakness</u>. The results listed in Step 2 are evaluated for their potential to occur.

4. <u>First determination of materiality</u>. Based on the information gained in Steps 1-3, the materiality of certain weaknesses can be ascertained. If the materiality of the weakness cannot be determined at this point, the checklist is continued.

5. <u>Interested parties affected by results from control weakness</u>. In this step a list is made of those parties that could be affected by the results of the control weakness.

6. <u>How are interested parties affected by the results</u>. The evaluator makes an assessment on the impact of the control weakness on the interested parties identified in Step 5.

7. <u>Second Determination of material weakness</u>. At this point the materiality of certain weaknesses can be ascertained. The checklist is continued for those that are still not determinable.

8. <u>Reaction of interested parties to results from control weakness</u>. This step evaluates the reaction of the parties listed in Step 5 to the effect of the control weakness identified in Step 6.

9. <u>Third determination of material weakness</u>. Based on the information gained in Steps 6-8, the materiality of certain weaknesses can be determined. For those that are still not determinable the checklist is continued.

10. <u>Impact of reaction of interested party</u>. The evaluator makes an assessment of the impact on the agency from the reactions listed in Step 8.

11. <u>Fourth determination of material weakness</u>. The materiality of certain weaknesses can be determined at this point. For those that are still not determinable, the checklist is continued.

12. <u>Final determination of material weakness</u>. At this point the checklist procedure stops and the evaluator makes a judgment on the materiality of the weakness. The logic behind this evaluation should be documented.

The quality of the determination of materiality obtained from the checklist is dependent on the evaluator. It is not a substitute for training and experience.

This material weakness checklist can be adapted by the agency and its segments to fit their specific needs. The establishment of specific limits of materiality (such as dollar limits) can be set by the segment performing the evaluation, or the authority it reports to. Either way, each weakness determined to be material, and those that are not definitely immaterial, should be reported to the

segment's next higher management responsibility level. This way the material weaknesses can be evaluated for that level as a whole, and a determination made if they should be reported to the next level.

VI. CONCLUSIONS AND RECOMMENDATIONS

A. INTRODUCTION

The purpose of this thesis was to review the process of evaluating internal control systems for the Federal Managers' Financial Integrity Act and the application of the concept of materiality to that process. Pertinent information gained in this research was documented in the previous chapters, and resulted in the guidelines covered in the last chapter. This chapter will present conclusions and recommendations.

B. CONCLUSIONS

The intent of Congress in the Federal Managers' Financial Integrity Act was to eliminate fraud, waste and abuse in agencies of the Federal Government. The main tool used in this effort is the internal control systems required by each agency. Although Congress intended the annual reporting requirement to provide agency accountability, it did not establish materiality guidelines.

The lack of materiality guidelines from Congress, OMB or other regulatory bodies has caused confusion among most agencies about what constitutes a material weakness in internal controls. This confusion stems from the limited knowledge about the implementation and evaluation of internal controls in the Federal Government. Although the promulgation of overall materiality standards by Congress, OMB or other

regulatory agency, would make the agency evaluation easier, it does not appear likely.

Materiality decisions are made on a daily basis by auditors in the private sector. They are made based on the high level of education, training and experience held by these auditors. Since internal control evaluation and review in the Federal Government is performed by line managers, in most cases they will not be as qualified as private sector auditors. Therefore, managers making these evaluations need additional training and aids such as checklists to complete their review of internal controls.

Although overall materiality levels can be set for an agency to determine what material weaknesses should be reported in the annual statement, the level of materiality for segments within an agency should be developed specifically for each segment. The method used by some agencies of setting a quantitative materiality threshold (i.e., $250,000), for use throughout the agency, could result in material weaknesses being ignored. Furthermore, this policy does not allow the intent of the Act to be followed. That is, the improvement of internal control systems throughout the agency for the prevention of fraud, waste and abuse.

The internal control evaluation required by the Act, has the potential to improve the overall system of internal control in the Federal Government. However, the Congress and the agencies must avoid making the evaluation simply a method

of meeting the annual reporting requirements. The review of internal controls should be conducted first for the evaluation and improvement of internal controls, and second for the annual report.

C. RECOMMENDATIONS

The internal control evaluation process and the determination of material weaknesses can be improved with the implementation of these recommendations in Federal Government agencies.

1. Increased Training For Management

The amount of training for managers involved with the internal control evaluation should be increased. This training should include a thorough indoctrination in the concept of materiality and its application to the determination of material weaknesses.

2. Checklists For Material Weakness Determination

The checklist included as Appendix A of this thesis should be used to determine material weaknesses. This checklist should be adapted by each segment of an agency to incorporate its own unique internal control systems. Internal control weaknesses uncovered in the review process should be evaluated for materiality by using these checklists.

3. Reporting Of Material Weaknesses

Each segment of an agency should report the weaknesses that are deemed material and those that are not definitely immaterial (those subject to judgment), to the next

responsibility level. At each successive level, the process of evaluating the materiality should be repeated to determine if the weakness should be reported to the next responsibility level. The weaknesses that are included in the annual report to Congress and the President should include any problem that is "significant to a program or individual agency component" [Ref. 22]. Therefore, the dismissal of segment material weaknesses as immaterial to the agency as a whole should be approached with caution.

4. Establishment Of Dollar Thresholds

Although the use of specific dollar thresholds of immateriality can make the determination of a material weakness easier, they are not exclusive. For example, while the $600 aircraft toilet seat would be well below most thresholds of materiality expressed in dollars, it is clear that the resultant press and Congressional interest makes it material. Therefore, dollar thresholds should be used with caution, and are best suited for financial accounting controls.

5. Emphasis On Internal Control Improvement

The annual reporting requirement was developed to insure that agencies in the Federal Government accounted for their internal control systems. However, the annual report must not become the means to the end. The primary focus of the internal control evaluation process must be on the segment level review. Agencies should insure that each segment evaluates their internal control system, determines weaknesses,

the materiality of those weaknesses and reports the findings to their next responsibility level. In addition, each segment should take steps to improve those controls which have material weaknesses which will result in more effective systems of internal control.

APPENDIX A

MATERIAL WEAKNESS CHECKLIST

For each internal control weakness discovered in the internal control review, complete a separate checklist.

____
Internal Control Weakness

1. Area Subject To Control

Give a brief description of area subject to control that contains a weakness.

____

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How sensitive is the area described above, to risk? This includes the risk of loss, fraud, waste and abuse. If a quantitative threshold (i.e., dollars) is available, the sensitivity can be evaluated as the risk of exceeding that threshold. In addition, access the risk of impairment of mission fulfillment, deprivation of needed services to the public, violation of statutory or regulatory requirements and conflict of interest.

SENSITIVE MODERATELY SENSITIVE NOT SENSITIVE.

Based on the sensitivity, select the reasonable assurance required. There is a direct correlation between sensitivity

and reasonable assurance required (i.e., sensitive to risk equals high reasonable assurance).

HIGH MEDIUM LOW

2. Possible Results From Control Weakness

Give a brief, itemized description of possible results from this control weakness. If the result can be quantified in dollars, list the amount of possible loss. Do not consider the likelihood of these results in this step, only the possibility of these results.

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____

3. Likelihood Of Possible Results From Control Weakness

For every possible result included in Step 2, evaluate the likelihood of that result occurring. The evaluation should use three levels of potential:

LIKELY POSSIBLE NOT LIKELY

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____

4. First Determination Of Material Weakness

If at this point the control weakness being evaluated requires high reasonable assurance per Step 1, and any results determined in Step 2 are evaluated as likely or possible in Step 3, the weakness is material. If the weakness requires low reasonable assurance, and all results in Step 3 are not likely, the weakness is not material. Based on this criteria, select one choice for the weakness being evaluated.

MATERIAL IMMATERIAL NOT DETERMINABLE

If the weakness is judged to be material, it should be reported and corrective action taken. If the weakness is judged to be immaterial, no further action is required. If the materiality of the weakness is not determinable at this point, continue with the checklist.

5. Interested Parties Affected By Results From Control Weakness

For each result in Step 2 that is considered to be likely or possible in Step 3, list the categories of interested parties affected by the results. These can be those who benefit from the area in question, those who control the agency, the public at large, press and media or others.

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6. <u>How Are Interested Parties Affected By Results</u>

For each category of interested party determined in Step 5, briefly describe how they are affected by the results of the control weakness. The party may be affected by one or all possible results. This effect may be in the form of deprivation of agency services, press interest, etc. For each category of interested party list the effect and its impact as:

SEVERE MEDIUM INSIGNIFICANT

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7. <u>Second Determination Of Material Weakness</u>

If at this point, if any interested party identified in Step 5 is evaluated in Step 6 as having a severe effect from the result, the weakness is material. Based on this determination, select one choice:

MATERIAL NOT DETERMINABLE

If the weakness is material, report it and take corrective action. If it is not determinable, continue with the checklist.

8. <u>Reaction Of Interested Parties To Results From Control Weakness</u>

If the materiality of the weakness was not determinable in Step 7, evaluate the reaction of all categories of interested

parties identified as being affected by the results of the control weakness in Step 6. Evaluate their reaction as:

EXTREME MODERATE INDIFFERENT

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____

9. <u>Third Determination Of Material Weakness</u>

If all the interested party reactions identified in Step 9 are indifferent, the weakness is immaterial. Based on this determination, select one choice:

IMMATERIAL NOT DETERMINABLE

If the weakness is immaterial, no further action is required. If the materiality of the weakness is not determinable, continue with the checklist.

10. <u>Impact Of Reaction Of Interested Party</u>

What will the impact of the reaction identified in Step 8 be to the program or agency? This could reduce funding from controlling groups, public distrust, inability to fulfill the mission, etc. For each reaction evaluated as extreme or moderate in Step 8, evaluate the impact as:

SEVERE MODERATE INSIGNIFICANT

____

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11. <u>Fourth Determination Of Material Weakness</u>

If any interested party reaction is evaluated as having a severe impact in Step 10, the weakness is material. If the impact is evaluated as insignificant, the weakness is probably immaterial. Based on this determination, select one choice:

MATERIAL IMMATERIAL NOT DETERMINABLE

If the weakness is material, report it and take corrective action. If it is immaterial, no further action is required. Continue with the checklist if the materiality is not determinable.

12. <u>Final Determination Of Material Weakness</u>

At this point the evaluator must use his or her judgment in determining whether a weakness is material or immaterial. Based on the knowledge and experience the evaluator has, outside expertise if available, and any other resources, determine if the weakness is:

MATERIAL IMMATERIAL

Provide a brief narrative on the basis for this determination.

____

____

____

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____

If the weakness is material, report it and take corrective action. If it is immaterial, no further action is required. Include this checklist with the working papers for the internal control evaluation.

LIST OF REFERENCES

1. Ninety-seventh Congress of the United States of America, The Federal Managers' Financial Integrity Act of 1982, 25 January, 1982, p. 1.

2. Office of Management and Budget, Circular No. A-123 Revised, Subject: Internal Control Systems, 16 August 1983, p. 2, par. k.

3. The Congress of the United States of America, Accounting and Auditing Act of 1950, 12 September, 1950, p. A-27, Sec. 112, par. (3).

4. Comptroller General of the United States, Fraud in Government Programs: How Extensive Is it, How Can It Be Controlled?, Volume 1, General Accounting Office, 30 September 1981.

5. Office of Management and Budget, Circular No. A-123, Subject: Internal Control Systems, 28 October, 1981.

6. Ninety-seventh Congress of the United States of America, The Federal Managers' Financial Integrity Act of 1982, 25 January, 1982, p. 2.

7. Comptroller General of the United States, Standards For Internal Controls In The Federal Government, 1983, p. 2.

8. Burton, John C., Palmer, Russell E., and Kay, Robert S., Handbook Of Accounting And Auditing, Boston, Massachusetts, Warren, Gorham & Lamont, Inc., 1981, p. 13-9.

9. Office of Management and Budget, Guidelines For The Evaluation And Improvement Of And Reporting On Internal Control Systems In The Federal Government, December, 1982.

10. Ibid., p. III-1.

11. Stein, Jeff, The Random House College Dictionary, New York, N.Y., Random House, 1980, p. 824.

12. Andersen, Arthur & Company, Objectives of Financial Statements for Business Enterprises, Arthur Andersen & Company, September, 1984, p. 1.

13. Securities and Exchange Commission, Regulation S-X.

14. Williams, Kathy, "Accountants Must Clean Up Their Act: Rep. John Dingell Speaks Out," Management Accounting, May 1985, p. 23.

15. Thomas, William C. and Krogstad, Jack L., "Materiality Guidance for Auditors," The Journal of Accountancy, February, 1979, p. 77.

16. Auditing Standards Board, Statement on Auditing Standards Number 47, Subject: Audit Risk and Materiality in Conducting an Audit, American Institute of Certified Public Accountants, December, 1983.

17. Ibid., p. 3.

18. Comptroller General Of The United States, Standards For Audit Of Governmental Organizations, Programs, Activities, And Functions, General Accounting Office, 1981 Revision, p. 69.

19. Mayper, Alan G., "Consensus of Auditors' Materiality Judgments of Internal Accounting Control Weaknesses," Journal of Accounting Research, Autumn, 1982, p. 782.

20. Office of Management and Budget, Circular No. A-123 Revised, Subject: Internal Control Systems, 16 August 1983, p. 3.

21. Ninety-Eighth Congress of the United States of America, Committee On Government Operations, Forty-Third Report, Subject: First-Year Implementation Of The Federal Managers' Financial Integrity Act, 2 August 1984, p. 11.

22. Ibid., p. 12.

BIBLIOGRAPHY

Barnes, Dianne P., "Materiality--An Illusive Concept," Management Accounting, October 1976.

Comptroller General of the United States, Impact of Foreign Corrupt Practices Act on U.S. Business, General Accounting Office, 4 March, 1981.

Comptroller General of the United States, Implementation of the Federal Managers' Financial Integrity Act: First Year, General Accounting Office, 24 August, 1984.

Connor, Joseph E. and DeVos, Burnell, H. Jr., Guide to Accounting Controls, Warren, Gorham & Lamont, 1979.

Defliese, Philip L., Johnson, Kenneth P. and Macleod, Roderick K., Montgomery's Auditing, Ninth Edition, Ronald, 1975.

Gafford, W. Wade and Carmichael, D.R., "Materiality, Audit Risk and Sampling: A Nuts-and-Bolts Approach, Part One," Journal of Accountancy, October, 1984.

Grady, Paul, "The Broader Concept of Internal Control," Journal of Accountancy, 1957.

Hensley, R. Dale, "Border Zone Limits for Materiality," Management Accounting, June, 1974.

Levin, Doron P., "Poor Controls at Rockwell Helped Make It a Fraud Victim, Report Says," The Wall Street Journal, Thursday, August 18, 1983.

Martin, Albert S. and Johnson, Kenneth P., Assessing Internal Accounting Control: A Workable Approach, Coopers & Lybrand, 1978.

O'Connor, Melvin C. and Collins, Daniel W., "Toward Establishing User-oriented Materiality Standards," Journal of Accountancy, December 1974.

Office of Management and Budget, Questions and Answers on Circular A-123, February, 1982.

Office of Management and Budget, Questions and Answers on Circular A-123 (Revised), August, 1984.

Pound, Edward T. and Ingersoll, Bruce, "How Frigitemp Sank After It was Looted by Top Management," The Wall Street Journal, Thursday, September 20, 1984.

San Miguel, Joseph G., Hy-Gain Electronics Corporation, President and Fellows of Harvard College, 1978.

Saunders, Laura, "Too Little Is Not Enough," Forbes, November 7, 1983.

Stilwell, Martin C. and Elliott, Robert K., "Beyond the Financial Statements--Progress with Protection for All," Journal of Accountancy, May, 1985.

United States Department of Commerce, Memorandum For Internal Control Committee, Subject: Departmental Definitions of "Reasonable Assurance" and "Materiality," September 28, 1984.

Van Pelt, John V. III, "Materiality," Management Accounting, June, 1975.

Ward, Bart H., "An Investigation of the Materiality Construct in Auditing," Journal of Accounting Research, Spring, 1976.

Weisenbach, Paul E., "Vulnerability Assessment and Internal Control Studies: What Are They and How Do You Do Them?," The Government Accountants Journal, Spring, 1983.

Zuber, George R. and others, "Using Materiality in Audit Planning," Journal of Accountancy, March, 1983.

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